EXPRESS TERMS

FOR

PROPOSED BUILDING STANDARDS

OF THE

OFFICE OF THE STATE FIRE MARSHAL

REGARDING THE 2007 CALIFORNIA BUILDING CODE

CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 2

The Office of the State Fire Marshal (OSFM) proposes to make necessary changes to the 2007 edition of the California Building Code (CBC), based on the 2006 International Building Code (IBC). OSFM further proposes to:

- Adopt necessary amendments to the model code;
- Repeal amendments to the model code that are no longer necessary.

Legend for Express Terms:

1. California amendments brought forward without modification: *All such language appears in Italics.*

2. California amendments brought forward with modification*: All such language appears in Italics, modified language is underlined.*

3. IBC language with new California amendment: IBC language is shown in normal Arial 9 pt. California amendments to IBC text appear *underlined and in italics.*

4. New California amendment: *California language appears underlined and in Italics.*

5. Repealed text: Shown as ~~*Strikeout*~~.

6. IBC text proposed to be removed: Shown as ~~Strikeout~~.

AMENDMENTS, REPEAL OF EXISTING AMENDMENTS AND/OR CALIFORNIA BUILDING STANDARDS NOT ADDRESSED BY MODEL CODES THAT ARE NO LONGER NECESSARY AS FOLLOWS:

CHAPTER 2

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 2 – DEFINITIONS

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
~~**Fire-Retardant Treated Wood**~~	~~**CA**~~		~~**X**~~																	
Laboratory	**CA**		**X**																	

~~***FIRE-RETARDANT TREATED WOOD [SFM]*** *is any wood product impregnated with chemicals by a pressure process or other means during manufacture, and which, when tested in accordance with ASTM E 84-05 for a period of 30 minutes, shall have a flame spread of not over 25 and show no evidence of progressive combustion. In addition, the flame front shall not progress more than 101/2 feet (3200 mm) beyond the center line of the burner at any time during the test. Materials that may be exposed to the weather shall pass the accelerated weathering test and be identified as Exterior type, in accordance with ASTM D 2898-94 and ASTM D 3201-94. Where material is not directly exposed to rainfall but exposed to high humidity conditions, it shall be subjected to the hygroscopic test and identified as Interior Type A in accordance with ASTM D 2898-94 and ASTM D 3201-94.*~~

~~*All materials shall bear identification showing the fire performance rating thereof. Such identifications shall be issued by an approved agency having a service for inspection of materials at the factory.*~~ (Relocated to 602.2, 602.3 and 602.4) *Fire-retardant-treated wood shall not be construed as "noncombustible."*

Authority: Health and Safety Code Sections 13108, 13108.5(a), 13143, 13210, 13211, and 18949.2(b) and (c) and Government Code Section 51189.
References: Health and Safety Code Sections 13143, 13211 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

LABORATORY. [SFM] *A room, building or area where the use and storage of hazardous materials are utilized for testing, analysis, teaching, research or developmental activities.*

LABORATORY SUITE. [SFM] *See Section 443.2*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143

CHAPTER 3

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
302.1.4	**CA**		**X**																	
Table 307.1(1)	**CA**		**X**																	
Table 307.1(2)	**CA**		**X**																	
313	**CA**		**X**																	
313.1	**CA**		**X**																	

302.1. *Laboratory (see Section 202): Group B, unless classified as Group L (See Section 443) or Group H (Section 307).*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers
Animal hospitals, kennels and pounds
Banks
Barber and beauty shops
Car wash
Civic administration
Clinic-outpatient *[SFM] (not classified as Group I-2.1)*
Dry cleaning and laundries: pick-up and delivery stations and self-service
Educational occupancies for students above the 12th grade
Electronic data processing
Laboratories: testing, ~~and~~ research and *[SFM] instruction*.
Motor vehicle showrooms
Post offices
Print shops
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations
Telephone exchanges
Training and skill development not within a school or academic program

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143

Table 307.1(1) footnote d
Revise to Table 307.1(1) Footnote d as follows:

d. *[SFM] In other than Group L occupancies,* ~~M~~maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an automatic sprinkler systems in accordance with Section 903.3.1.1. Where note e also applies, the increase for both notes shall be applied accumulatively.

Table 307.1(2) footnote e
Revise to Table 307.1(2) Footnote d as follows:

e. *[SFM] In other than Group L occupancies,* ~~M~~maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an automatic sprinkler systems in accordance with Section 903.3.1.1. Where note e also applies, the increase for both notes shall be applied accumulatively.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143

313 Laboratories Group L [SFM]

313.1 Laboratories Group L: *[SFM] Group L occupancy includes the use of a building or structure, or a portion thereof containing one or more laboratory suites as defined in Section 443.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)

References: Health and Safety Code Sections 13143

CHAPTER 4

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
403.11.	**CA**		**X**																	
403.11.1	**CA**		**X**																	
414.1.1	**CA**		**X**																	

[F] 403.10.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center require by Section 403.8; *and*
2. ~~Electrically powered fire pumps; and~~
3. ~~.~~ Ventilation and automatic fire detection equipment for smokeproof enclosures.

Standby power shall be provided for elevators in accordance with Sections 1007.4 and 3003.

[F] 403.11 Emergency power systems. An emergency power system complying with Section 2702 shall be provided for emergency power loads specified in Section 403.11.1.

[F] 403.11.1 Emergency power loads. The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10;
2. Elevator car lighting;
3. Emergency voice/alarm communications systems;
4. Automatic fire detection systems; ~~and~~
5. Fire alarm systems; *and*
6. *Fire pumps.*

Authority: Health and Safety Code Sections 13210, 13211, 13143, 18949.2(b)
References: 13211 and 13143

[F] 414.1.1 Other provisions. Buildings and structures with an occupancy in Group H shall also comply with the applicable provisions of section 415 and the California Fire Code. *For Group L occupancies see section 443.*

Authority: Health and Safety Code Sections 13108, 13143, 18949.2(b)
References: Health and Safety Code Sections 13143

425.3 Building Height and Area Provisions.

425.3.1 *Group I-1, R-3.1, and R-4 shall be constructed in accordance with Table 503.* ~~***One or two stories.*** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) one or two stories in height where more than six nonambulatory clients are housed shall be constructed of a minimum one-hour fire-resistance-rated construction throughout.~~

~~***425.3.2 Three to five stories.*** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) three to five stories in height where more than six nonambulatory clients are housed above the first floor shall be constructed of a minimum Type IIA construction.~~

~~***425.3.3 Six or more stories*** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) exceeding five stories in height where more than six nonambulatory clients are housed above the fifth floor shall be constructed of a minimum Type IA construction.~~

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

425.5 Fire-Resistance-Rated Construction Provisions.

425.5.1 Smoke barriers required. *Group I-1 and R-4 occupancies licensed as a Residential Care Facility (RCF) with individual floor areas over 6000 square feet (557 m^2) per floor, shall be provided with smoke barriers, constructed in accordance with Section 709.*

Group I-1 occupancies housing bedridden clients shall be provided with smoke barriers constructed in accordance with Section 709 regardless of the number of clients.

When smoke barriers are required, the area within a smoke compartment shall not exceed 22,500 square feet (2090 m^2) nor shall its travel distance exceed 200 feet (60 960 mm). Such smoke barriers shall divide the floor as equally as possible.

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

425.8.6.1 *Group I-1* ~~*and Group R-4*~~ *occupancies housing more than six non-ambulatory clients above the first floor shall be provided with two vertical exit enclosures. Stairway enclosures shall be in compliance with Section 1020. Exceptions to Section 1020 shall not apply in facilities licensed as a 24-hour care facility.*

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

425.8.7.1 Doors within floor separations. *Doors within such floor separations shall be tight fitting solid wood at least 13/8 inches (35 mm) in thickness. Door glazing shall not exceed 1,296 square inches (32 918 mm^2) with no dimension greater than 54 inches (1372 mm). Such doors shall be positive latching, smoke gasketed and shall be automatic- closing by smoke detection.*

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

425.8.8 Fences and gates. *Grounds of a residential care for the elderly facility serving Alzheimer's clients may be fenced and gates therein equipped with locks, provided safe dispersal areas are located not less than 50 feet (15 240 mm) from the buildings. Dispersal areas shall be sized to provide an area of not less than 3 square feet (0.28 m^2) per*

occupant. Gates shall not be installed across corridors or passageways leading to such dispersal areas unless they comply with egress requirements.

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

~~425.2.3~~ 425.10 Temporarily bedridden clients. *Clients who become temporarily bedridden as defined in Health and Safety Code Section 1569.72, as enforced by the Department of Social Services, may continue to be housed on any story in Group I-1, R-3.1, or R-4 occupancies classified as Residential Care Facilities for the Elderly (RCFE). Every Residential Care Facility for the Elderly (RCFE) admitting or retaining a bedridden resident shall, within 48 hours of the resident's admission or retention in the facility, notify the local fire authority with jurisdiction of the estimated length of time the resident will retain his or her bedridden status in the facility.*

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6
References: Health and Safety Code Sections 13143

430.1 *For automatic sprinkler and fire alarm system requirements applying to each building, barn or structure which is used by an association regulated by the California Horse Racing Board for the stabling of horses or human habitation, and the stable area grounds, including any additional location where any excess horses are stabled, see Title 4, Division 4, ~~Article 1~~ Article 17, Section 1927.*

Authority: Health and Safety Code Sections 13108, 13143, 18949.2(b)
References: Health and Safety Code Sections 13143

SECTION 443 GROUP L ~~[SFM]~~

443.1 ~~Group L laboratories.~~ *~~For applications listed in Section 111 regulated by the office of the State Fire Marshal, Group L occupancies shall include buildings and structures or portions thereof, used as laboratories for scientific experimentation or research having quantities of materials not in excess of those listed in Tables 443.1(1) and 443.1(2), except as modified in this section and not classified as a Group B occupancy. This occupancy shall be designed and constructed in accordance with the requirements for a Group B occupancy except as specified in this section.~~* ***Scope.*** *The provisions of this section shall apply to buildings or structures, or portions thereof, containing one or more Group L laboratory suites as defined in Section 443.2.*

443.2 ~~Requirements for Group L~~ Definitions

LABORATORY SUITE. *A laboratory suite is a space within a building or structure, which may include multiple laboratories, offices, storage, equipment rooms or similar support functions, where the aggregate quantities of hazardous materials stored and used do not exceed the quantities set forth in Table 443.7.3.1.*

[F] LIQUID TIGHT FLOOR. *A non-permeable barrier capable of containing hazardous material liquids without degradation.*

~~443.2.1 Multiple hazards.~~ *~~When a hazardous material has multiple hazards, all hazards shall be addressed and controlled in accordance with the provisions of this code.~~*

~~443.2.2 Requirement for report.~~ *~~The enforcing agency may require a technical opinion and report to identify and develop methods of protection from the hazards presented by the hazardous materials. A qualified person, firm, or corporation, approved by the enforcing agency, shall prepare the opinion and report, and shall be provided without charge to the enforcing agency. The opinion and report may include,but is not limited to, the preparation of a hazardous material management plan (HMMP); chemical analysis; recommendations for methods of isolation, separation, containment or protection of hazardous materials or processes, including appropriate engineering controls to be applied; the extent of changes in the hazardous behavior to be anticipated under conditions of~~*

~~*exposure to fire or from hazard control procedures; and the limitations or conditions of use necessary to achieve and maintain control of the hazardous materials or operations. The report shall be entered into the files of the code enforcement agencies. Proprietary and trade secret information shall be protected under the laws of the state or jurisdiction having authority.*~~

~~***443.2.3 Laboratory suite.*** *A laboratory suite is a space up to 10,000 square feet (929m2) bounded by not less than a one-hour fire-resistance-rated fire barrier within which the maximum allowable quantity of hazardous materials in accordance with Tables 443.1(1) and 443.1(2) may be stored, dispensed, handled or used.*~~

~~***443.2.4 Emergency power.*** *An emergency power system shall be provided. The emergency power system shall be designed and installed in accordance with the California Electrical Code to automatically supply power to all required electrical equipment when the normal electrical supply system is interrupted. The exhaust system may be designed to operate at not less than one-half the normal fan speed on the emergency power system when it is demonstrated that the level of exhaust will maintain a safe atmosphere.*~~

~~***443.2.5 Construction Type.*** *Buildings containing Group L occupancies shall be of Type I or Type IIA construction.*~~

~~***Exception****: Buildings of less than three stories shall be a minimum of Type VA construction.*~~

~~***443.2.6 Floor construction****. Liquid-tight floors, which comply with ASTM D 2843 (OI greater than 25) and ASTM E 84 (Class 1), shall be required. Pipe and similar penetrations shall maintain the fire-resistive and liquid-tight characteristics of the floor a minimum of 4 inches (102 mm) at the bottom of walls from the floor level.*~~

~~***443.2.7 Fire-barrier separation.*** *The interstitial space above a laboratory shall be separated from a corridor by 1-hour construction. Laboratories and similar areas shall not require fire barrier separation from each other when the use of the area is determined to be compatible. Classrooms and offices directly related to the use shall not require a fire-barrier separation.*~~

~~***443.2.8 Fume hood exhaust ducts.*** *Fume hood exhaust ducts exposed to fire-resistive exit corridors shall be separated from the corridor by 1-hour fire-resistive construction.*~~

~~***443.2.9 Emergency spill response.*** *An area for spill emergency response equipment shall be located on each floor and shall be a minimum of 50 square feet (4.6 m2) with an increase in the size at the rate of 5 square feet (0.46 m2) per 1,000 square feet (93 m2) in excess of 10,000 square feet (929 m2).*~~

~~***443.3 Hazardous material restrictions.***~~

~~***443.3.1 Hazardous material restrictions - Floors 1, 2, 3, and 1st basement level.*** *Up through the third floor and down through the first basement level, the maximum quantity of hazardous materials per laboratory suite shall comply with Tables 443.1(1) and 443.1(2). Quantities of materials shall not bpermitted to be increased with an approved automatic sprinkler system.*~~

~~***443.3.2 Hazardous material restrictions - Floors 4, 5, 6, and 2nd and 3rd basement levels****. For the fourth, fifth, and sixth floors, and the second and third basement levels, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 75 percent of those allowed by Tables 443.1(1) and 443.1(2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.*~~

~~***443.3.3 Hazardous material restrictions - Floors 7 and above, and below 3rd basement level.*** *For the seventh floor and above, and below the third basement floor level, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 50 percent of those allowed by Tables 307.1(1) and 307.7(2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.*~~

443.3 Laboratory suite requirements.

443.3.1 *The gross square footage of an individual laboratory suite shall not exceed 10,000 sq.ft. (929m2).*

443.3.2 *An individual laboratory suite shall not serve more than a single tenant.*

Exception: *A laboratory suite controlled by a single responsible party.*

443.4 Construction

~~443.~~4.1 Separation of Laboratory Suites

~~443.~~4.1.1 *Laboratory suites shall be separated from other occupancies in accordance with Table 508.3.3.*

~~443.~~4.1.2 *Laboratory suites shall be separated from other laboratory suites by a fire barrier having a fire-resistance rating of not less than 1- hour.*

~~443.~~4.1.3 *Laboratory suites shall be separated from control areas by a minimum 2-hour fire-resistance rating in accordance with Section 706 and 711.*

> ***Exception:*** *Laboratory suites shall be separated from control areas by a minimum 1-hour fire-resistance rating on floor levels below the 4th story.*

~~443.~~4.1.4 Horizontal Separation. *The floor construction of the laboratory suite and the construction supporting the floor of the laboratory suite shall have a minimum 2-hour fire-resistance rating in accordance with Section 711.*

> ***Exceptions:***
>
> *1. The floor construction of the laboratory suite and the construction supporting the floor of the laboratory suite are allowed to be 1-hour fire-resistance rated in buildings of Type IIA, IIIA, and VA construction.*
>
> *2. When an individual laboratory suite occupies more than one story, the intermediate floors contained within the suite shall comply with the requirements of Table 601.*

~~443.~~4.2 Structural design occupancy category.

~~443.~~4.2.1 *Buildings containing Group L occupancies with an occupant load greater than 500 for colleges or adult education facilities, or other buildings with an occupant load greater than 5,000 shall be classified as Occupancy Category III in accordance with Chapters 16 and 16A.*

~~443.~~4.2.2 *Other buildings containing Group L occupancies shall be classified as Occupancy Category II in accordance with Chapters 16 and 16A.*

~~443.6.5 Horizontal Exits~~ ~~443.~~4.3 Fire barrier. ~~*Group L occupancies located four or more floors above the first floor shall heave each floor of the building separated with at leas one horizontal exit constructed as a 2-hour fire barrier.*~~ *A fire barrier having a fire resistance rating of not less than two hours shall divide any floor above the 4th story containing more than one laboratory suite.*

~~443.~~4.3.1 *Fire barriers shall be continuous from exterior wall to exterior wall,*

~~443.~~4.3.2 ~~*No side shall be less than 30 percent of the total area for the floor.*~~ *The fire barrier shall divide the floor so that the square footage on each side of the 2-hour fire barrier is not less than 30 percent of the total floor area, and 443.4.3.3 The number of laboratory suites on each side of the 2-hour fire barrier shall not be less than 25% of the total number of laboratory suites on the floor.*

~~443.2.9~~ ~~443.~~4.4 Emergency ~~Spill~~ response equipment area. *An area ~~dedicated~~ for ~~spill~~ emergency response equipment ~~and supplies~~ shall be ~~located~~ provided on each floor in an approved location.~~ and~~ The area shall be a minimum of 50 square feet (4.6 m2), ~~on each floor~~ accessed from outside the laboratory suite and identified with signage ~~with an increase in the size at the rate of 5 square feet (0.46 m2) per 1,000 square feet (93 m2) in excess of 10,000 square feet (929 m2).~~*

~~443.~~4.5 Liquid tight floor*. All portions of the laboratory suite where hazardous materials may be present shall be provided with a liquid tight floor. Where the floor is designed to provide spill control or secondary containment the floor shall be designed in accordance with California Fire Code section 2704.2.*

~~443.2.4~~ ~~443.~~4.6 Emergency power. *An emergency power system shall be provided in accordance with Chapter 27.*

~~443.~~4.6.1 Required systems. *Emergency power shall be provided for electrically operated equipment and connected control circuits for the following systems:*
1. Mechanical ventilation systems. See section 443.4.7.
2. Emergency alarm and monitoring systems.
3. Temperature control systems required to prevent unsafe process excursions or chemical reactions.

4. Electrically operated systems required elsewhere in this code.

~~443.4~~ 443.4.7 Ventilation.

~~443.4.1~~ 443.4.7.1 ~~General~~ Compatibility. *~~In all Group L occupancies, exhaust streams~~ Mechanical exhaust ducts when combined shall not create a physical hazard or react to degrade the ~~containment~~ duct material. The building official may require a technical report in accordance with Section ~~443.2~~ 443.7.1. ~~Fire and smoke dampers in fume hood exhaust ducts are prohibited. Ducts from laboratory hoods and local exhaust systems shall be constructed entirely of noncombustible materials.~~*

~~Exceptions:~~
~~1. Flexible ducts for special local exhausts used within a laboratory work suite.~~
~~2. Combustible ducts with flame spread index less than 75 located within a shaft of noncombustible construction where passing through areas other than the laboratory suite they serve and provided with internal fire sprinklers.~~
~~3. Combustible ducts or duct linings having a flame spread of 25 or less.~~

~~Exhaust ducts from each laboratory suite shall be separately ducted to a point outside the building, to a mechanical space or to a shaft. Connection to a common duct may occur at those points. Exhaust ducts within the same laboratory suite may be combined within that laboratory suite.~~

~~Perchloric acid hoods and exhaust ducts shall be constructed of materials that are acid resistant, nonreactive, and impervious to perchloric acid. A water spray system shall be provided for washing down the hood interior behind the baffle and the entire duct system. Ductwork shall provide a positive drainage slope back to the hood and shall consist of sealed sections. The hood baffle shall be removable for inspection.~~

443.4.7.2 Fire dampers, smoke dampers and combination fire/smoke dampers. *Fire dampers, smoke dampers or fire/smoke dampers shall not be permitted in product conveying and other mechanical exhaust duct systems used to maintain a safe laboratory environment. When the exhaust duct penetrates the laboratory suite boundary the exhaust duct shall be located within a horizontal assembly having a fire resistance rating equal to the fire barrier.*

443.4.7.3 Duct materials. *Product conveying and other mechanical exhaust duct systems used to maintain a safe laboratory environment shall be constructed in accordance with Chapters 5 and 6 of the California Mechanical Code.*

443.4.7.4 Laboratory suite exhaust. *Laboratory suite exhaust air shall not be recirculated and shall be independently ducted to a point outside the building or a roof top structure.*

Exceptions:
1. Exhaust ducts serving a single laboratory suite.
2. Exhaust ducts serving separate laboratory suites on the same story may be connected to a common duct within a fire rated vertical shaft when the sub-ducts extended vertically upward at least 22 inches.
3. Exhaust ducts serving separate laboratory suites on the basement through the 4th story may be connected to a common duct within a fire rated vertical shaft when the sub-ducts extended vertically upward at least 22 inches.
4. Exhaust ducts serving separate laboratory suites on the 5th story and above may be connected to a common duct that does not exceed 100 vertical feet within a fire rated vertical shaft when the subducts extended vertically upward at least 22 inches. Ducts serving the 5th story and above shall be a separate from the duct serving the 4th story and below, but may be within the same fire rated shaft.
5. Exhaust ducts shall not penetrate the 2-hour fire barrier required by Section 443.4.3 unless it is part of a 2-hour shaft.

~~443.4.2~~ 443.4.7.5 Ventilation rates. *~~Ventilation rates shall comply with the requirements of the Mechanical Code.~~Mechanical exhaust ventilation systems shall provide a minimum ventilation rate not less than 1 cubic feet per minute per square foot [0.00508 m3/(s·m2)] of floor area, or 6 air exchanges per hour, whichever is greater. Systems shall operate continuously at the designed ventilation rate.*

443.4.7.6 Mechanical ventilation systems on emergency power. *When operating on emergency power, the ventilation rate may be reduced to a level sufficient to maintain a differential pressure negative to the surrounding area.*

443.4.7.7 Mechanical ventilation system balancing. *Mechanical ventilation systems shall be designed and balanced such that during normal and emergency conditions the door opening forces comply with the requirements of Sections 1008.1.2 and 1133B.2.5 as applicable. Emergency conditions shall include: supply fan shutdown or failure, closing of smoke dampers or combination fire/smoke dampers, or emergency power.*

~~***443.5 Special hazards.***~~

~~***443.5.1 Special hazards****. Storage, handling and use of hazardous materials in Group L occupancies shall comply with the California Fire Code.*~~

443.5. Fire protection systems. *See Chapter 9.*

443.6 Means of egress.

443.6.1 Access to exits. *Every portion of a ~~Group L occupancy~~ laboratory suite containing hazardous materials and having a floor area of ~~200~~500 square feet (19m²) or more shall have access to not less than two separate exits or exit-access ~~doors~~ doorways in accordance with Section 1015.2.*

443.6.2 Travel distance within ~~rooms~~ L Occupancy. ~~*Within a Group L occupancy all portions of any room shall be within 100 feet (30 480mm) to an exit.*~~ *Travel distance within an individual laboratory suite shall not exceed 125 feet.*

443.6.3 Door swing. *All exit and exit-access doors serving areas with hazardous materials shall swing in the direction of exit travel, regardless of the occupant load served.*

443.6.4 Panic hardware. *Exit and exit access doors from areas with hazardous materials shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.*

443.6.5 ~~Horizontal exits~~ Buildings more than 4 stories. ~~*Buildings containing Group L occupancies located four or more floors above the first floor shall have each floor of the building separated with at least one horizontal exit constructed as required for a 2-hour fire barrier. Each side of the horizontal exit shall be provided with a separate mechanical exhaust system without interconnection. No side shall be less than 30 percent of the total area for the floor. At least one elevator shall be provided to serve the floor on each side of the horizontal exit wall and shall comply with the provisions of Chapter 30*~~ *A minimum of one exit shall be provided to serve the floor on each side of the 2-hour fire barrier and shall comply with the provisions of Chapter 10.*

443.6.6 Corridors ~~doors.~~ ~~*Corridor doors shall be protected by a fire assembly having a fire protection rating of not less than ¾ hour with smoke gasketing, shall not have more than 100 square inches (64 516 mm²) of wired glass set in steel frames and shall be maintained self closing or shall be automatic closing.*~~ *Corridors shall comply with Section 1017 and shall have opening protectives in accordance with Table 715.4, Table 715.5 and Table 715.5.3.*

~~***443.7 Automatic fire sprinkler system. See Section 903.2.16.***~~

~~***443.8 Fire alarm system. See Section 907.2.28.***~~

443.7 Hazardous materials

443.7.1 Technical report. *The enforcing agency may require a technical opinion and report to identify and develop methods of protection from the hazards presented by the hazardous materials. A qualified person, firm, or corporation, approved by the enforcing agency, shall prepare the opinion and report, and shall be provided without charge to the enforcing agency. The opinion and report may include, but is not limited to, the preparation of a hazardous material management plan (HMMP); chemical analysis; recommendations for methods of isolation, separation, containment or protection of hazardous materials or processes, including appropriate engineering controls to be applied; the extent of changes in the hazardous behavior to be anticipated under conditions of exposure to fire or from hazard control procedures; and the limitations or conditions of use necessary to achieve and maintain control of the hazardous materials or operations. The report shall be entered into the files of the code enforcement agencies. Proprietary and trade secret information shall be protected under the laws of the state or jurisdiction having authority.*

~~443.2.1~~ 443.7.2 Multiple hazards. *When a hazardous material has multiple hazards, all hazards shall be addressed and controlled in accordance with the provisions of this code.*

443.7.3 Percentage of maximum allowable quantities. *The percentage of the maximum allowable quantity of hazardous materials per laboratory suite permitted for each story level within a building shall be in accordance with Table 443.7.3.1.*

TABLE 443.7.3.1

HAZARDOUS MATERIALS QUANTITY PER LABORATORY SUITE

STORY		***PERCENTAGE OF THE MAXIMUM ALLOWBALE QUANTITY PER LABORATORY SUITE[a, b]***
Above grade plane	*7 and above*	*50*
	4, 5 and 6	*75*
	1, 2 and 3	*100*
Below grade plan	*1*	*100[c]*
	2	*75[d]*
	3 and below	*0*

[a] Percentages shall be of the maximum allowable quantity per laboratory suite shown in Tables 307.1(1) and 307.1(2). Allowable hazardous material increases for buildings equipped throughout with an automatic sprinkler system shall not be applicable to Group L Occupancies.

[b] When an individual laboratory suite occupies more than one story, the more restrictive percentage of the maximum allowable quantity per laboratory suite shall apply.

[c] The total aggregate quanity of flammable liquids on the first floor level below grade shall be limited to the maximum total aggregate quantity for Group B control areas.)

[d] The total aggregate quanity of flammable liquids on the second floor level below grade shall be limited to a maximum total aggregate quantity for Group B control areas.

~~443.9~~ 443.8 Existing Group L (Formerly Group H-8) occupancies, additions, alterations, or repairs. *See section 3414.*

~~TABLE 443.1(1)~~
~~MAXIMUM ALLOWABLE QUANTITY PER LABORATORY SUITE OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD1~~

~~CONDITION~~		***~~STORAGE~~***			***~~USE-CLOSED SYSTEMS~~***			***~~USE-OPEN SYSTEMS~~***		
~~MATERIAL~~	***~~CLASS~~***	***~~Solid (pounds per cubic feet.)~~***	***~~Liquid Gallons (Lbs.)~~***	***~~Gas Cu. Ft.~~***	***~~Solid Lbs. (Cu. Ft.)~~***	***~~Liquid Gallons (Lbs.)~~***	***~~Gas Cu. Ft.~~***	***~~Solid Lbs. (Cu. Ft.)~~***	***~~Liquid Gallons (Lbs.)~~***	***~~Gas Cu. Ft.~~***
~~1.1 Combustible liquid~~	*~~II~~*	*~~-~~*	*~~1202~~*	*~~-~~*	*~~-~~*	*~~120~~*	*~~-~~*	*~~-~~*	*~~30~~*	*~~-~~*
	~~III-A~~	*~~-~~*	*~~3302~~*	*~~-~~*	*~~-~~*	*~~330~~*	*~~-~~*	*~~-~~*	*~~80~~*	*~~-~~*
	~~III-B~~	*~~-~~*	*~~13,2002~~*	*~~-~~*	*~~-~~*	*~~13,200~~*	*~~-~~*	*~~-~~*	*~~3,300~~*	*~~-~~*
~~1.2 Combustible dust lbs/1000 cu. ft.~~		*~~1~~*	*~~-~~*	*~~-~~*	*~~1~~*	*~~-~~*	*~~-~~*	*~~1~~*	*~~-~~*	*~~-~~*
~~1.3 Combustible fiber (loose) (baled)~~		*~~(100) (1,000)~~*	*~~--~~*	*~~--~~*	*~~(100) (1,000)~~*	*~~--~~*	*~~--~~*	*~~(20) (200)~~*	*~~--~~*	*~~--~~*
~~1.4 Cryogenic, flammable or oxidizing~~			*~~45~~*	*~~-~~*	*~~-~~*	*~~45~~*	*~~-~~*	*~~-~~*	*~~10~~*	*~~-~~*
~~2.1 Explosives~~		*~~12~~*	*~~(1)2~~*	*~~-~~*	*~~1/4~~*	*~~(1/4)~~*	*~~-~~*	*~~1/4~~*	*~~(1/4)~~*	*~~-~~*
~~3.1 Flammable solid~~		*~~1252~~*	*~~-~~*	*~~-~~*	*~~25~~*	*~~-~~*	*~~-~~*	*~~25~~*	*~~-~~*	*~~-~~*
~~3.2 Flammable gas (gaseous) (liquefied)~~		*~~--~~*	*~~152~~*	*~~7502 -~~*	*~~--~~*	*~~152~~*	*~~7502 -~~*	*~~--~~*	*~~--~~*	*~~--~~*
~~3.3 Flammable liquid Combination I-A, I-B, I-C~~	*~~I-A~~*	*~~-~~*	*~~302~~*	*~~-~~*	*~~-~~*	*~~30~~*	*~~-~~*	*~~-~~*	*~~10~~*	*~~-~~*
	~~I-B~~	*~~-~~*	*~~602~~*	*~~-~~*	*~~-~~*	*~~60~~*	*~~-~~*	*~~-~~*	*~~15~~*	*~~-~~*

	I-C	-	902	-	-	90	-	-	20	-
		-	1202	-	-	120	-	-	30	-
4.1 Organic peroxide, unclassified detonatable		12	(1)2	-	1/4	(1/4)	-	1/4	(1/4)	-
4.2 Organic peroxide	I II III IV V	52 502 1252 500 N.L.	(5)2 (50)2 (125)2 (500) N.L.	----	(1) 50 125 500 N.L.	(1) (50) (125) (500) N.L.	----	1 10 25 100 N.L.	1 (10) (25) (100) N.L.	----
4.3 Oxidizer	4 3 2 1	12 102 2502 1,0002	(1)2 (10)2 (250)2 (1,000)2	----	1/4 2 2 50 1,000	(1/4) (2) (250) (1,000)	----	1/4 2 50 200	(1/4) (2) (50) (200)	----
4.4 Oxidizer: Gas (gaseous) (liquefied)		--	-152	1,5002 -	--	-152	1,5002 -	--	--	--
5.1 Pyrophoric		42	(4)2	502	1	(1)	102	0	0	0
6.1 Unstable (reactive)	4 3 2 1	12 52 502 1252	(1)2 (5)2 (50)2 (125)2	102 502 2502 7502	1/4 1 50 125	(1/4) (1) (50) (125)	22 102 2502 7502	1/4 1 10 25	(1/4) (1) (10) (25)	0 0 0 0
7.1 Water (reactive)	3 2 1	52 502 1252	(5)2 (50)2 (125)2	---	5 50 125	(5) (50) (125)2	---	1 10 25	(1) (10) (25)	---

1. See Section 443.3 Hazardous Material Restrictions.
2. Quantities may be increased 100 percent when stored in approved exhausted gas cabinets, exhausted enclosures or fume hoods.

TABLE 443.1(2)
MAXIMUM QUANTITY PER LABORATORY SUITE OF HAZARDOUS MATERIALS POSING A HEALTH HAZARD1

	STORAGE			USE-CLOSED SYSTEMS			USE-OPEN SYSTEMS	
MATERIAL	Solid Lbs.	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs.	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs.	Liquid Gallons (Lbs.)
1. Corrosives	5,000	500	6502	5,000	500	650	1,000	100
2a. Highly toxics2	40	10	65	5	1	65	2	1/4
2b. Toxics	500	50	6502	500	50	650	5	1/2
3. Irritants	5,000	500	650	5,000	500	650	1,000	100
4. Sensitizers	5,000	500	650	5,000	500	650	1,000	100
5. Other health hazards	5,000	500	650	5,000	500	650	1,000	100

1. See Section 443.3 Hazardous Material Restrictions.
2. Permitted only when stored or used in approved exhausted gas cabinets, exhausted enclosures or fume hoods. Quantites of high toxics in use in open systems need not be reduced above the third floor or below the first basement floor level. Individual container size shall be limited to 2 pounds (0.91 kg) for solids and 1/4 gallon (0.95 L) for liquids.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 5

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS

TABLE 503
ALLOWABLE HEIGHT AND BUILDING AREAS[a]
Height limitations shown as stories and feet above grade plane.
Area limitations as determined by the definition of "Area, building," per story

		TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
GROUP	HGT(feet) HGT(S)	UL	160	65	55	65	55	65	50	40
A-1	S	UL	5	3	2	3	2	3	2	1
	A	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
A-2	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-3	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-4	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-5	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	S	UL	11	5	4	5	4	5	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
E	S	UL	5	3	2	3	2	3	1	1
	A	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9,500
F-1	S	UL	11	4	2	3	2	4	2	1
	A	UL	UL	25,000	15,500	19,000	12,000	33,500	14,000	8,500
F-2	S	UL	11	5	3	4	3	5	3	2
	A	UL	UL	37,500	23,000	28,500	18,000	50,500	21,000	13,000
H-1	S	1	1	1	1	1	1	1	1	NP
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	NP
H-2[d]	S	UL	3	2	1	2	1	2	1	1
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	3,000
H-3[d]	S	UL	6	4	2	4	2	4	2	1
	A	UL	60,000	26,500	14,000	17,500	13,000	25,500	10,000	5,000
H-4	S	UL	7	5	3	5	3	5	3	2
	A	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
H-5	S	4	4	3	3	3	3	3	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
I-1	S	UL	~~9~~5	~~4~~2	~~3~~*NP*	~~4~~2	~~3~~*NP*	~~4~~*NP*	~~3~~2	~~2~~*NP*
	A	UL	55,000	19,000	~~10,000~~ *NP*	16,500	~~10,000~~ *NP*	~~18,000~~ *NP*	10,500	~~4,500~~ *NP*
I-2/I-2.1[f]	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-3[e]	S	UL	*2*	*NP*	*NP*	*NP*	*NP*	*NP*	*NP*	*NP*
	A	UL	*15,100*	*NP*	*NP*	*NP*	*NP*	*NP*	*NP*	*NP*
I-4	S	UL	5	3	2	3	2	3	1	1

	A	UL	60,500	26,500	13,000	23,500	13,000	25,500	18,500	9,000
~~*L*~~	~~*S*~~	~~*10*~~	~~*3*~~	~~*3*~~	~~*2*~~	~~*3*~~	~~*2*~~	~~*3*~~	~~*3*~~	~~*1*~~
	~~*A*~~	~~*UL*~~	~~*39,900*~~	~~*18,000*~~	~~*12,000*~~	~~*18,000*~~	~~*12,000*~~	~~*18,000*~~	~~*14,000*~~	~~*8,000*~~
L	*S*	*UL*	*6*	*5*	*3*	*5*	*3*	*5*	*3*	*2*
	A	*UL*	*60,000*	*37,500*	*17,500*	*28,500*	*17,500*	*36,000*	*18,000*	*6,500*
	S	UL	11	4	4	4	4	4	3	1
M	A	UL	UL	21,500	12,500	18,500	12,500	20,500	14,000	9,000
R-1	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
R-2	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
R-3*/R-3.1*	S	UL	11	4	4	4	4	4	3	3
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
R-4	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
S-1	S	UL	11	4	3	3	3	4	3	1
	A	UL	48,000	26,000	17,500	26,000	17,500	25,500	14,000	9,000
S-2 [b, c]	S	UL	11	5	4	4	4	5	4	2
	A	UL	79,000	39,000	26,000	39,000	26,000	38,500	21,000	13,500
U [c]	S	UL	5	4	2	3	2	4	2	1
	A	UL	35,500	19,000	8,500	14,000	8,500	18,000	9,000	5,500

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2.
UL = Unlimited, NP = Not permitted.

a. See the following sections for general exceptions to Table 503:
1. Section 504.2, Allowable height increase due to automatic sprinkler system installation. 2. Section 506.2, Allowable area increase due to street frontage. 3. Section 506.3, Allowable area increase due to automatic sprinkler system installation. 4. Section 507, Unlimited area buildings.

b. For open parking structures, see Section 406.3.

c. For private garages, see Section 406.1.

d. See Section 415.5 for limitations.

e. [SFM] See Section 408.1.1 for specific exceptions for one-story Type IIA, Type IIIA or Type VA construction.

f. Restraint shall not be permitted in any building except in Group I-3 occupancies constructed for such use (see Section 308.4).

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

508.3.2.3 Separation. No separation is required between occupancies.

Exception: Group H-2, H-3, H-4, I-2, I-2.1, ~~or~~ I-3*, or L* occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 6

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 6 – TYPES OF CONSTRUCTION

Adopting Agency	BSC	**SFM**	HCD	DSA	OSHPD	CSA	DHS	AGR	DWR	CEC	CA	SL	SLC

				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			X																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
602.2 — 602.4	**CA**		**X**																	

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (hours)

	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
BUILDING ELEMENT	**A**	**B**	**A[e]**	**B**	**A[e]**	**B**	**HT**	**A[e]**	**B**
Structural frame[a]	3[b]	2[b]	1	0	1	0	HT	1	0
Bearing walls									
Exterior[g]	3	2	1	0	2	2	2	1	0
Interior	3[b]	2[b]	1	0	1	0	1/HT	1	0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior[f]	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction Including supporting beams and joists	2	2	1	0	1	0	HT	1	0
Roof construction Including supporting beams and joists	11/2 [c]	1[c, d]	1[c, d]	0[d]	1[c, d]	0[d]	HT	1[c, d]	0

For SI: 1 foot = 304.8 mm.

a. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.

b. Roof supports: Fire-resistance ratings of structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

c.*1*. Except in *high-rise buildings*, Group *A, E*, F-1, H, *I, L*, M, *R-1, R-2* and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

c.2 For high-rise buildings, Group A, E, I, L, R-1 and R-2 occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, fire protection of members other than the structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

c.3. One-story portions of Group A and E assembly occupancies the roof-framing system of Type II A or Type III A construction may be of unprotected construction when such roof-framing system is open to the assembly area and does not contain concealed spaces.

d. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.

e. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.

f. Not less than the fire-resistance rating required by other sections of this code.
g. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

602.2 Types I and II. Type I and II construction are those types of construction in which the building elements listed in Table 601 are of noncombustible materials, except as permitted in Section 603 and elsewhere in this code. (Relocated from chapter 2 definition of Fire-retardant-treated wood) *[SFM] Fire-retardant-treated wood shall not be construed as "noncombustible.*

602.3 Type III. Type III construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of a 2-hour rating or less. (Relocated from chapter 2 definition of Fire-retardant-treated wood) *[SFM] Fire-retardant-treated wood shall not be construed as "noncombustible.*

602.4 Type IV. Type IV construction (Heavy Timber, HT) is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of solid or laminated wood without concealed spaces. The details of Type IV construction shall comply with the provisions of this section. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies with a 2-hour rating or less. Minimum solid sawn nominal dimensions are required for structures built using Type IV construction (HT). For glued-laminated members the equivalent net finished width and depths corresponding to the minimum nominal width and depths of solid sawn lumber are required as specified in Table 602.4. (Relocated from chapter 2 definition of Fire-retardant-treated wood) *[SFM] Fire-retardant-treated wood shall not be construed as "noncombustible.*

Authority: Health and Safety Code Sections 13108, 13108.5(a), 13143, 13210, 13211, and 18949.2(b) and (c) and Government Code Section 51189.
References: Health and Safety Code Sections 13143, 13211 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

CHAPTER 7

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 7 – FIRE-RESISTANCE-RATED CONSTRUCTION

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
~~**705.1.2**~~	~~**CA**~~		~~**X**~~																	
708.1	**CA**		**X**																	

704.5 Fire-resistance ratings. *For other than high-rise buildings, Group A, E, H, I, L and R occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, e*xterior walls shall be fire-resistance rated in accordance with Tables 601 and 602. The fire-resistance rating of exterior walls with a fire separation distance of greater than 5 feet (1524 mm) shall be rated for exposure to fire from the inside. The fire-

resistance rating of exterior walls with a fire separation distance of 5 feet (1524 mm) or less shall be rated for exposure to fire from both sides.

For high-rise buildings, Group A, E, H, I, L and R occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, exterior walls shall be fire-resistance rated in accordance with Tables 601 and 602. The fire-resistance rating of exterior walls with a fire separation distance of greater than 20 feet (1524 mm) shall be rated for exposure to fire from the inside. The fire-resistance rating of exterior walls with a fire separation distance of 20 feet (1524 mm) or less shall be rated for exposure to fire from both sides.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

~~***705.1.2 Automatic fire sprinklers. [SFM].*** *Fire walls shall not be considered to create separate buildings for the purpose of automatic sprinkler system requirements as set forth in Chapter 9.~~

> ~~***Exception:*** *Buildings separated by continuous fire walls of 4-hour fire resistance construction without openings. Buildings required to have automatic fire sprinkler protection as set forth in Section 13113 of the Health and Safety Code are prohibited from using fire walls in lieu of automatic fire sprinkler protection.*~~

Authority: Health and Safety Code Sections 13108, 13143, 18949.2(b)
References: Health and Safety Code Sections 13143

707.14.1 – Elevator Lobby – An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than *two stories in high-rise buildings, Group A, E, H, I, L, R-1 and R-2 occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal, and* more than three stories *for all other occupancies*. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. *[SFM]* In other than ~~Group I-3, and~~ *high-rise* buildings, *Group A, E, H, I, L, R-1 and R-2 occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal,* enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. *[SFM] When approved, in other than Group I-2 occupancies* enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.
7. *[SFM] In other than high-rise buildings, enclosed elevator lobbies are not required where the hoistway door has a fire-protection rating as required by Section 711.4 and the hoistway door opening is also protected by a listed and labeled smoke containment system complying with ~~ICBO~~ ICC ES AC 77.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

708.1 General. The following wall assemblies shall comply with this section.

1. Walls separating dwelling units in the same building.
2. Walls separating sleeping units in occupancies in Groups R-1 hotel, R-2 and I-1 occupancies.
3. Walls separating tenant spaces in covered mall buildings as required by Section 402.7.2.

4. Corridor walls as required by Section 1017.1.
5. Elevator lobby separation as required by Section 707.14.1.
6. Residential aircraft hangars.
7. Walls separating enclosed tenant spaces in high-rise buildings and in buildings of Types I, IIA, IIIA, IV, or VA construction of Group A, E, H, and I occupancies and other applications listed in Section 111 regulated by the Office of the State Fire Marshal.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 7A

701A.3.2 New Buildings Located in Any Fire Hazard Severity Zone. *~~New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.~~ New buildings located in any Fire Hazard Severity Zone shall comply with one of the following:*

1. ***State Responsibility Areas.*** *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*

2. ***Local Agency Very-High Fire Hazard Severity Zone.*** *New buildings located in any Local Agency Very-High Fire Hazard Severity Zone, for which an application for a building permit is submitted on or after July 1, 2008, shall comply with all sections of this chapter.*

3. ***Wildland-Urban Interface Fire Area designated by the enforcing agency .*** *New buildings located in any Wildland-Urban Interface Fire Area designated by the enforcing agency, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*

SECTION 702A
DEFINITIONS

WILDLAND-URBAN INTERFACE FIRE AREA *is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. ~~See Section 706A for the applicable referenced sections of the Government Code and the Public Resources Code.~~*

704A.1.3 Roof valleys. *When provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of ~~No. 72 ASTM~~ 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D 3909 running the full length of the valley.*

704A.2.1 General. *When required by Chapter 15, roof and attic vents shall resist the intrusion of flame and embers into the attic area of the structure, or shall be protected by corrosion-resistant, noncombustible wire mesh with openings a minimum of 1/8-inch (3.2 mm) and shall not exceed 1/4-inch (6 mm) ~~openings~~ or its equivalent.*

704A.3.2.2 Exterior glazing and window walls. *Exterior windows, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, or glass block units, or have a fire-resistance rating of not less than 20 minutes, when tested according to ~~ASTM E 2010,~~ NFPA 257, or in accordance with section 715, or conform to the performance requirements of SFM 12-7A-2.*

704A.3.2.3 Exterior door assemblies. *Exterior door assemblies shall conform to the performance requirements of standard SFM 12-7A-1 or shall be of approved noncombustible construction, or solid core wood having stiles and rails not less than 13/8 inches thick with interior field panel thickness no less than 11/4 inches thick, or shall have a fire-resistance rating of not less than 20 minutes when tested according to ~~ASTM E 2074,~~ NFPA 252, or in accordance with section 715.*

Exception: *Noncombustible or exterior fire-retardant treated wood vehicle access doors are not required to comply with this chapter.*

Authority: Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.
References: Health and Safety Code Sections 13143 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

CHAPTER 8

TABLE 803.5
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY[k]

	SPRINKLERED[l]			NONSPRINKLERED[m]		
GROUP	Exit enclosures and exit passageways[a,b]	Corridors	Rooms and enclosed spaces[c]	Exit enclosures and exit passageways[a,b]	Corridors	Rooms and enclosed spaces[c]
A-1 & A-2	B	B	C	A	A[d]	B[e]
A-3[f], A-4, A-5	B	B	C	A	A[d]	C
B, E, *L,* M, R-1, R-4	B	C	C	A	B	C
F	C	C	C	B	C	C
H	B	B	C[g]	A	A	B
I-1	B	C	C	A	B	B
I-2*, I-2.1*	B	B	B[h, i]	A	A	B
I-3	A	A[j]	*B*	—	—	—
I-4	B	B	B[h, i]	A	A	B
R-2	C	C	C	B	B	C
R-3, *R3-1*	C	C	C	C	C	C
S	C	C	C	B	B	C
U	No restrictions			No restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929m2.
a. Class C interior finish materials shall be permitted for wainscotting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where
applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.4.1.
b. In exit enclosures of buildings less than three stories in height of other than Group I-3, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted.
c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.

f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
g. Class B material is required where the building exceeds two stories.
h. Class C interior finish materials shall be permitted in administrative spaces.
i. Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less.
j. Class B materials shall be permitted as wainscotting extending not more than 48 inches above the finished floor in corridors.
k. Finish materials as provided for in other sections of this code.
l. Applies when the exit enclosures, exit passageways, corridors or rooms and enclosed spaces are protected by a sprinkler system installed in accordance with Section
903.3.1.1 or 903.3.1.2.
m. [SFM] Not permitted for Group I-3.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

804.4.1 Minimum critical radial flux. Interior floor finish and floor covering materials in exit enclosures, exit passageways and corridors shall not be less than Class 1 in Groups ~~s~~ I-2 and not less than Class II in Groups A, B, E, H, I-4, *L,* M, R-1, R-2 and S. In all areas, floor covering materials shall comply with *ASTM Standard E 648, and having a smoke density rating of less than 450 per ASTM Standard E 84.*.

> **Exception:** Where a building *other than a Group I-3* is equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1 or 903.3.1.2, Class II materials are permitted in any area where Class I materials are required, and materials complying with *ASTM Standard E 648, and having a smoke density rating of less than 450 per ASTM Standard E 84* are permitted in any area where Class II materials are required.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 9

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 9 – FIRE PROTECTION SYSTEMS

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
903.2.1.2	**CA**		**X**																	
903.2.1.3	**CA**		**X**																	
903.2.3.1	**CA**		**X**																	
903.2.6	**CA**		**X**																	
903.4.2	**CA**		**X**																	
907.2.12.1.1	**CA**		**X**																	
907.2.12.1.2	**CA**		**X**																	
907.2.28	**CA**		**X**																	

910.1	**CA**		**X**																	
910.3.1	**CA**		**X**																	

[F] 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:
1. The fire area exceeds 5,000 square feet (465 m2);
2. The fire area has an occupant load of 100 or more; or
3. The fire area is located on a floor other than the level of exit discharge.
4. The structure exceeds 5,000 square feet (465 m2), contains more than one fire area containing a Group A-2 occupancy, and is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.

[F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:
1. The fire area exceeds 12,000 square feet (1115 m2).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.
4. The structure exceeds 12,000 square feet (1155 m2), contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.
Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

[F] 903.2.2 Group E. *Except as provided for in Sections 903.2.2.1 for a new public school campus and 907.2.3.6.1 (fire alarm and detection) for modernization of an existing public school campus building(s),* an automatic sprinkler system shall be provided for Group E occupancies as follows:
1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m2) in area.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.
4. Throughout any Group E structure greater than 20,000 square feet (1155 m2) in area, which contains more than one fire area, and which is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

[F] 903.2.3.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232m2) in area which generate finely divided combustible waste or use finely divided combustible materials. *[SFM] A fire wall of less than four-hour fire-resistance rating, or any fire wall with openings, shall not be used to establish separate fire areas without openings.*

[F] 903.2.6 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
1. Where a Group M fire area exceeds 12,000 square feet (1115 m2);
2. Where a Group M fire area is located more than three stories above grade plane; or
3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).
4. [SFM] The structure exceeds 24,000 square feet (465 m2), contains more than one fire area containing a Group M occupancies, and is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.

Authority: Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.
References: Health and Safety Code Sections 13143 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

[F] 903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

Exceptions:
1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress, unless specifically required by other sections of this code, or classified as Group R-4.
2. Group U private garages accessory to a Group R-3 occupancy.
3. Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
4. Group R-3.1 occupancies housing only one bedridden client and complying with Section 425.8.3.3.
~~*4.*~~ *5. Pursuant to Health and Safety Code Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.*
~~*5.*~~ *6. Pursuant to Health and Safety Code Section 13143.6, occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).*

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6, 18949.2(b)
References: Health and Safety Code Sections 13143

[F] 903.4.2 Alarms. *One exterior* ~~Approved~~ *approved* audible device~~s~~ shall be connected to every automatic sprinkler system *in an approved location*. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. ~~Alarm devices shall be provided on the exterior of the building in an approved location.~~ Where a *building* fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. *Visible alarm notification appliances shall not be required except when required by section 907.*

Authority: Health and Safety Code Sections 13143, 13113, 13114.7, 18949.2(b)
References: Health and Safety Code Sections 13143

[F] 907.2.12.1 Automatic fire detection.

***[F[* 907.2.12.1.1 Smoke Detection.** Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system *in accordance with Section 907.6.2.2*. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection~~, elevator machine rooms, and in elevator lobbies~~.
2. *In each elevator machine room and in elevator lobbies.*

***[F[907.2.12.1.2 Duct smoke detection.** Smoke detectors listed for use in air duct systems shall be provided in accordance with this section and the California Mechanical Code. The activation of any detector required by this section shall initiate a visible and audible supervisory signal at a constantly attended location. Duct smoke detectors shall be located as follows:*

~~2~~. *1.* In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m3/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
~~3~~. *2.* At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a duct smoke detector is allowed to be used in each return-air riser carrying not more than 5,000 cfm (2.4m3/s) and serving not more than 10 air-inlet openings.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

[F] 907.2.28 Group L. *A manual fire alarm system shall be installed throughout buildings containing Group L occupancy. When Group L occupancies are located in mixed use buildings, at least one manual fire alarm box shall be located in the Group L occupancy.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

[F] 907.11 Duct smoke detectors. *Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct.* Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is provided. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location *and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code*. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exceptions:
1. The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the buildings alarm notification appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

[F] 910.1 General. Where required by this code or otherwise installed, smoke and heat vents or mechanical smoke exhaust systems and draft curtains shall conform to the requirements of this section.

Exceptions:
1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, automatic smoke and heat vents shall not be required within these areas. *This exception shall not apply to any state institution or other state-owned or state-occupied buildings or other applications listed in Section 111 regulated by the Office of the State Fire Marshal.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

[F] 910.3.1 Design. Smoke and heat vents shall be listed and labeled to indicate compliance with *FM 4430, ICC ES AC 331, or* UL 793.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 10

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 10 – MEANS OF EGRESS

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			X																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
Table 1004.1.1	**CA**		**X**																	
1008.1.9	**CA**		**X**																	

TABLE 1004.1.1
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	FLOOR AREA IN SQ. FT. PER OCCUPANT
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Assembly with fixed seats	See Section 1004.7
Assembly without fixed seats	
Concentrated (chairs only-not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Courtrooms-other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	

Classroom area Shops and other vocational room areas	20 net 50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas Inpatient treatment areas Outpatient areas Sleeping areas	 240 gross 100 gross 120 gross
Kitchens, commercial	200 gross
Laboratory *Educational* *Laboratories, non-educational* *Laboratory suite*[a]	 *50 net* *100 net* *200 gross*
Library Reading rooms Stack area	 50 net 100 gross
Locker rooms	50 gross
Mercantile Areas on other floors Basement and grade floor areas Storage, stock, shipping areas	 60 gross 30 gross 300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools Rink and pool Decks	 50 gross 15 gross
Stages and platforms	15 net
Warehouses	500 gross

For SI: 1 square foot = 0.0929 m2.

[a] *See section 443.2.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

1008.1.2 Door swing. Egress doors shall be side-hinged swinging.

Exceptions:
1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
2. Group I-3 occupancies used as a place of detention.
3. Critical or intensive care patient rooms within suites of health care facilities.
4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.
5. In other than Group H occupancies, revolving doors complying with Section 1008.1.
6. In other than Group H occupancies, horizontal sliding doors complying with Section 1008.1.3.3 are permitted in a means of egress.
7. Power-operated doors in accordance with Section 1008.1.3.2.
8. Doors serving a bathroom within an individual sleeping unit in Group R-1.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H occupancy.

~~*9. In a Group I-2 occupancy, all required exterior egress doors shall open in the direction of egress regardless of the occupant load served.*~~

~~10.~~9. In I-2 and I-2.1 occupancies, exit doors serving an occupant load of 10 or more, may be of the pivoted or balanced type.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H occupancy. *For Group L occupancies see Section 443.6.3.*

In a Group I-2 occupancy, all required exterior egress doors shall open in the direction of egress regardless of the occupant load served.

The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15-pound (67 N) force. Forces shall be applied to the latch side.

Authority: Health and Safety Code Sections 13108, 13143
References: Health and Safety Code Sections 13143

1008.1.8.6 Delayed Egress Locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E, H *and L occupancies*.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

1008.1.9 Panic and fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:…

Each door in a means of egress from a Group A or assembly area not classified as an assemble occupancy, E, I-2 or I-2.1 occupancies having an occupant lad of 50 or more and Group H occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware*. For Group L occupancies see Section 443.6.4.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

1015.1 Exit or exit access doorways required. Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds the values in Table 1015.1.
2. The common path of egress travel exceeds the limitations of Section 1014.3.
3. Where required by Sections 1015.3, 1015.4 and 1015.5.
4. In detention and correctional facilities and holding cells~~,~~ such as are found in courthouse buildings, a minimum of two means of egress shall be provided when the occupant load is more than 20.

Exception: Group I-2 occupancies shall comply with Section 1014.2.2.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

TABLE 1015.1
SPACES WITH ONE MEANS OF EGRESS

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E[a], F, M, U	49
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	29

L	*See Section 443.6.1*

a. Day care maximum occupant load is 10.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

TABLE 1016.1
EXIT ACCESS TRAVEL DISTANCE[a]

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, F-1, I-1, M, R, S-1	200	250[b]
B	200	300[c]
F-2, S-2, U	300	400[c]
H-1	Not Permitted	75[c]
H-2	Not Permitted	100[c]
H-3	Not Permitted	150[c]
H-4	Not Permitted	175[c]
H-5	Not Permitted	200[c]
I-2, I-3[d], I-4	150	200[c]
L	*Not Permitted*	~~*100c*~~ *225*[c]

For SI: 1 foot = 304.8 mm.
a. See the following sections for modifications to exit access travel distance requirements:
Section 402: For the distance limitation in malls.
Section 404: For the distance limitation through an atrium space.
Section 1016.2 For increased limitations in Groups F-1 and S-1.
Section 1025.7: For increased limitation in assembly seating.
Section 1025.7: For increased limitation for assembly open-air seating.
Section 1019.2: For buildings with one exit.
Chapter 31: For the limitation in temporary structures.
b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems in accordance with Section 903.3.1.2 are permitted.
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
d. Not permitted in nonsprinklered Group I-3 occupancies.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

TABLE 1017.1
CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system[c]
H-1, H-2, H-3~~, *L*~~	All	Not Permitted	1
H-4, H-5*, L*	Greater than 30	Not Permitted	1
A[d], B, F, M, S, U	Greater than 30	1	0
R	Greater than 10	Not Permitted	*1*

I-2[a] , I-2.1, I-4	*Greater than 6*	Not Permitted	*1*
I-1, I-3	*Greater than 6*	Not Permitted	1[b]
E	*Greater than 10*	*1*	*1*

a. For requirements for occupancies in Group I-2, see Section 407.3.
b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
d. [SFM] See Section 1025.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

1017.2 Corridor width. The minimum corridor width shall be as determined in Section 1005.1, but not less than 44 inches (1118 mm).

Exceptions:
1. Twenty-four inches (610 mm)—For access to and utilization of electrical, mechanical or plumbing systems or equipment.
2. Thirty-six inches (914 mm)—With a required occupant capacity of less than 50.
3. Thirty-six inches (914 mm)—Within a dwelling unit.
4. Seventy-two inches (1829 mm)—In Group E with a corridor having a required capacity of 100 or more.
5. Seventy-two inches (1829 mm)—In corridors serving surgical Group I, health care centers for ambulatory patients receiving outpatient medical care, which causes the patient to be not capable of self-preservation.
6. Ninety-six inches (2438 mm)—In Group I-2 *and I-3 occupancies* in areas where required for bed movement- *or* ~~7. C~~*c*orridors *in Group I-2 and I-3 occupancies serving any area caring for one or more nonambulatory persons* ~~*shall not be less than 8 feet (2438 mm) in width*~~.

Authority: Health and Safety Code Sections 13108, 13113, 13143
References: Health and Safety Code Sections 13143

1017.4 Air movement in corridors. Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts ~~*when required to be fire-resistive rated in accordance with Table 1017.1*~~.

Exceptions:
1. Use of a corridor as a source of makeup air for exhaust systems in *small* rooms *of 30 square feet (2.8 m2) or less* that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, and janitor closets, shall be permitted, provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.
2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.
3. Where located within tenant spaces of 1,000 square feet (93 m2) or less in area, utilization of corridors for conveying return air is permitted.
4. [OSHPD 1, 2, 3 & 4] For restrictions on the use of corridors to convey air, see Chapter 4 of the California Mechanical Code.
5. [SFM] For health care facilities under the jurisdiction of the Office of Statewide Health Planning and Development (OSHPD), see the California Mechanical Code.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

1025.3.1 Occupant loads less than 300. ~~*For Group A occupancies, at least one exit shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in width that adjoins a street or public way.*~~ *Group A occupancies that have an occupant load of 100 or more and less than 300 shall have at least one of the required means of egress directly to an exit, or through a lobby, that is not used to access the* ~~*main*~~ *other required exit, to an exit or to a 1-hour-rated corridor to an exit or continuous through a 1-hour-rated lobby to an exit. At least one exit*

shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in width that adjoins a street or public way.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 12

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 12 – INTERIOR ENVIRONMENT

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter			~~X~~																	
Adopt Entire Chapter as amended (amended sections listed below)			X																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
1203.5	**CA**		X																	

1203.5 Other ventilation and exhaust systems. Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the California Mechanical Code or the California Fire Code shall be provided as required by both codes. *For Group L occupancies see Section 443.4.7.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 23

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 23 – WOOD

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SL C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below			X																	
Chapter / Section	Codes																			
2303.2 — 2303.2.6	**IBC**		X																	

Authority: Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.
References: Health and Safety Code Sections 13143 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

CHAPTER 27

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 27 – ELECTRICAL

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter			~~X~~																	
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
2702.2.21	**CA**		**X**																	

2702.2.21 Group L-Occupancy. *Emergency power shall be provided in Group L occupancies in accordance with Section 443.4.6.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 30

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 30 – ELEVATORS AND CONVEYING SYSTEMS

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)			**X**																	
Adopt only those sections that are listed below																				
Chapter / Section	Codes																			
3006.5 ~~,~~ 3006.5.3			**X**																	

3002.4a.4 Elevator recall. *The elevator(s) designated the medical emergency elevator shall be equipped with a key switch to recall the elevator nonstop to the main floor. For the purpose of this section, elevators in compliance with Section 3003.2~~.1.1~~ shall be acceptable.*

Authority: Health and Safety Code Sections 13143, 18949
References: Health and Safety Code Sections 13143

3002.9.5 *Switches shall be kept in working order or be removed when existing installations are arranged to comply with Section 3002.9.5, Exception 1 or 2.*

EXCEPTIONS

1. Elevators installed and maintained in compliance with Section 3003.~~2.1.~~

2. Where alternate means acceptable to the division and fire authority having jurisdiction are provided that will ensure the doors can close under adverse smoke conditions.

Authority: Health and Safety Code Sections 13143, 18949
References: Health and Safety Code Sections 13143

~~3003.2.1 General.~~ *~~Elevators with automatic operation and automatic power-operated hoistway doors shall conform to the following:~~*

> ***~~EXCEPTION:~~*** *~~New elevators having a travel of not more than 25 feet (7620mm) and elevators existing at the time of adoption of this order with a travel of not more than 50 feet (15 240 mm).~~*

~~3003.2.1.1~~ *~~A three-position (on, off and bypass) key-operated switch shall be provided at the main floor for each single elevator or for each group of elevators. The key shall be removable only in the on and off positions. When the switch is in the on position, all elevators controlled by this switch and which are on automatic service shall return nonstop to the main floor and the doors shall open and remain open.~~*

~~1. An elevator traveling away from the main floor shall reverse at the next available floor without opening its doors.~~
~~2. Elevators standing at a floor other than the main floor with doors open, shall close the doors without delay, and proceed to the main floor.~~
~~3. Door reopening devices for power-operated doors which are sensitive to products of combustion, heat or flame shall be rendered inoperative.~~
~~4. All car and corridor call buttons shall be rendered inoperative and all call registered lights and direction lanterns shall be extinguished and remain inoperative.~~
~~5. A car stopped at a landing shall have its .emergency stop switch. rendered inoperative as soon as the doors are closed and it starts toward the main floor. A moving car traveling to or away from the main floor shall have its emergency stop switch rendered inoperative immediately.~~
~~6. A sensing device at each elevator landing which, when activated, prevents cars from stopping at that floor shall not be substituted for the above requirements.~~

~~3003.2.1.2~~ *~~In addition to the key-operated switch required in Section 3003.9 above, annunciating devices shall be installed in accordance with NFPA 72, Automatic Fire Detectors, at each elevator landing at each floor, except the main floor. The sensing devices shall be smoke-sensing devices approved and listed as suitable for this purpose by the state fire marshal. The activation of a sensing device at any elevator landing shall cause all cars in all groups that serve that landing to return nonstop to the main floor. The operation shall conform to the requirements of Section 3003.2.1. The key-operated switch required by Section 3003.2.1, when moved to the .bypass. position, shall restore normal service independent of the sensing devices.~~*

> ***~~EXCEPTIONS:~~*** *~~1. Elevator landings of unenclosed landings open to the atmosphere or open to an interior court of a building.~~*
> *~~2. Freight elevators located in single-use buildings where openings are into manufacturing areas.~~*

~~3003.2.1.3~~ *~~Elevators without a landing at grade level shall be returned to that landing closest to grade level or other level approved by the local fire authorities and shall conform to the requirements of Section 3003.2.1.~~*

~~3003.2.1.4~~ *~~Elevators having a travel of 70 feet (21 336 mm) or more above the lowest grade elevation surrounding the building shall be provided with the following operation:~~*

~~3003.2.1.4.1~~ *~~A two-position (off, on) key-operated switch shall be provided in or adjacent to an operating panel in each car and shall be effective only when the main floor key-operated switch is in the on position or a sensing device has been activated and the car has returned to the main floor or other approved level. The key shall be removable only in the off position, and when in the on position, it shall place the elevator on emergency service.~~*

~~3003.2.1.4.2~~ *~~The operation of elevators on emergency service shall be as follows:~~*

~~1. An elevator shall be operable only by a person in the elevator.~~
~~2. Elevators shall not respond to elevator corridor calls.~~

~~*3. The opening of power-operated doors shall be controlled only by continuous pressure .door open. buttons or switches. If the switch or button is released prior to the doors reaching the fully open position, the doors shall automatically reclose. Open doors shall be closed by registration of a car call or by pressure on .door close. switch or button.*~~
~~*4. The car shall stay on emergency service as long as the car key is in the on position even though the main floor key-operated switch is returned to its off position.*~~
~~*5. The emergency stop switch shall be rendered operative.*~~

~~***3003.2.1.5** The switches required by Section 3003.2.1 shall be operated by the same key, but shall not be a part of a building master key system. There shall be a key for the main floor switch and for each elevator in the group, and these keys shall be kept on the premises by the person responsible for maintenance and operation of the elevators, in a location approved by the local fire protection authorities readily accessible to authorized persons, but not where they are available to the public. The locks shall be of the cylinder type having not less than a 5-pin or 5-disc combination.*~~

~~***3003.2.2 Attendant-operated elevators.** Elevators operable only by a designated attendant in the car shall be provided with a signal system consisting of both visual and audible types actuated at the main floor or other approved level, to alert the attendant to return nonstop to the main floor or other approved level. Provisions shall be made to alert the attendant in the same manner when a sensing device is activated.*~~

~~***3003.2.3 Elevators arranged for dual operation.** Elevators arranged for dual operation shall, when on automatic operation, conform to Section 3003.2.1, and when on operation by a designated attendant in the car, conform to Section 3003.2.1.*~~

~~***3003.2.4 Operating instructions.** Instructions for operation of elevators under fire and other emergency conditions shall be incorporated within the enclosure for the switch at the main floor required by Section 3003.9 or shall be posted adjacent to it. Instructions shall be in letters not less than 1/4 inch (6.4 mm) in height and shall be permanently installed and protected against removal and defacement.*~~

~~***3003.2.5*~~ ***3003.2.1 Floor numbers.** Elevator hoistways shall have a floor number not less than 4 inches (102 mm) in height, placed on the walls and/or doors of the hoistway at intervals such that a person in a stalled elevator, upon opening the car door, can determine the floor position.*

~~***3003.2.6*~~ ***3003.2.1.1 Fire signs.** All automatic elevators shall have not less than one sign at each landing printed on a contrasting background in letters not less than 1/2 inch (12.7 mm) high to read: IN CASE OF FIRE USE STAIRWAY FOR EXIT. DO NOT USE ELEVATOR.*

~~***3003.2.7*~~ ***3003.2.1.2 Call and Car Operation Buttons.** Automatic passenger elevators shall have call and car operation buttons within 60 inches (1524 mm) of the floor. Emergency telephones shall also be within 60 inches (1524 mm) of the floor.*

Authority: Health and Safety Code Sections 13143, 18949
References: Health and Safety Code Sections 13143

3006.5 Shunt trip. Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, Section ~~3-9.4,~~ *6.16.4,* Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to the application of water. This means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply.

***3006.5.1** Elevator power shunt-trip shall not activate prior to the completion of elevator Phase I emergency recall operation to the designated recall floor.*

***3006.5.2** The elevator power shunt-trip shall be disengaged and shall not activate during Phase II emergency in-car operation.*

***3006.5.3** Audible and visual annunciation shall be provided inside all elevator cars and at the fire alarm control unit indicating that automatic sprinklers, smoke detectors or heat detectors located in the top of the elevator hoistway or elevator machine room have activated.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 34

SECTION 3414 [SFM]
EXISTING GROUP L OCCUPANCIES

3414.1 General. *Additions, alterations or repairs, may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this code section, provided the addition, alteration or repair conforms to ~~the requirements of this section~~ that required for a new building or structure.*

3414.2 Unsafe condition. *Additions, repairs, or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, nor shall such additions or alterations cause the existing building or structure to become unsafe, or to be in violation of any of the provisions of this code. An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.*

3414.3 Changes in use or occupancy. *Any buildings that have alternations or additions, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings.*

3414.4 Buildings not in compliance with code. *Additions or alterations shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such addition or alteration will result in the existing building or structure being no more hazardous, based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken.*

3414.5 Maintenance of structural and fire-resistive integrity. *Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member of any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed. The installation or replacement of glass shall be as required for new installations.*

3414.6 Continuation of existing use. *Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life.*

~~***3414.7*** *Laboratories which are located above the 10th story prior to 1992 may have their use continued and may have additions, alterations and repairs when all the following are provided:~~

~~*1. Additions, alterations and repairs do not extend beyond the existing story; where the Group L is located;*~~
~~*2. Comply with all other provisions for a new Group L Occupancy; and*~~
~~*3. An automatic fire alarm system is installed in accordance with Section 907.*~~

3414.7 Maximum Allowable Quantities. *Laboratory suites approved prior to January 1, 2008 shall not exceed the maximum allowable quantities listed in Tables 3414.1 and 3414.2*

TABLE ~~443.1(1)~~ 3414.7(1) EXEMPT AMOUNTS OF HAZARDOUS MATERIALS, LIQUIDS AND CHEMICALS PRESENTING A PHYSICAL HAZARD BASIC QUANTITIES PER LABORATORY SUITE[1]
When two units are given, values within parentheses are in cubic feet (Cu. Ft.) or pounds (Lbs.)

CONDITION		STORAGE			USE CLOSED SYSTEMS			USE OPEN SYSTEMS		
MATERIAL	CLASS	Solid Lbs. (Cu. Ft.)	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs. (Cu. Ft.)	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs. (Cu. Ft.)	Liquid Gallons (Lbs.)	Gas Cu. Ft.
1.1 Combustible liquid	II	—	120[2]	—	—	120	—	—	30	—

	III-A	—	330[2]	—	—	330	—	—	80	—
	III-B	—	13,200[2]	—	—	13,200	—	—	3,300	—
1.2 Combustible dust lbs./1000 cu. ft.		1	—	—	1	—	—	1	—	—
1.3 Combustible fiber (loose) (baled)		(100) (1,000)	— —	— —	(100) (1,000)	— —	— —	(20) (200)	— —	— —
1.4 Cryogenic, flammable or oxidizing			45	—	—	45	—	—	10	—
2.1 Explosives		12	(1)[2]	—	1/4	(1/4)	—	1/4	(1/4)	—
3.1 Flammable solid		125[2]	—	—	25	—	—	25	—	—
3.2. Flammable gas (gaseous) (liquefied)		— —	— 15[2]	750[2] —	— —	— 15[2]	750[2] —	— —	— —	— —
3.3 Flammable liquid Combination I-A, I-B, I-C	I-A	—	30[2]	—	—	30	—	—	10	—
	I-B	—	60[2]	—	—	60	—	—	15	—
	I-C	—	90[2]	—	—	90	—	—	20	—
		—	120[2]	—	—	120	—	—	30	—
4.1 Organic peroxide, unclassified detonatable		1[2]	(1)[2]	—	1/4	(1/4)	—	1/4	(1/4)	—
4.2 Organic peroxide	I II III IV V	5[2] 50[2] 125[2] 500 N.L.	(5)[2] (50)[2] (125)[2] (500) N.L.	— — — — —	(1) 50 125 500 N.L.	(1) (50) (125) (500) N.L.	— — — — —	1 10 25 100 N.L.	1 (10) (25) (100) N.L.	— — — — —
4.3 Oxidizer	4 3 2 1	1[2] 10[2] 250[2] 1,000[2]	(1)[2] (10)[2] (250)[2] (1,000)[2]	— — — —	1/4[2] 2 50 1,000	(1/4) (2) (250) (1,000)	— — — —	¼ 2 50 200	(1/4) (2) (50) (200)	— — — —
4.4 Oxidizer.Gas (gaseous) (liquefied)		— —	— 15[2]	1,500[2] —	— —	— 15[2]	1,500[2] —	— —	— —	— —
5.1 Pyrophoric		4[2]	(4)[2]	50[2]	1	(1)	10[2]	0	0	0
6.1 Unstable (reactive)	4 3 2 1	1[2] 5[2] 50[2] 125[2]	(1)[2] (5)[2] (50)[2] (125)[2]	10[2] 50[2] 250[2] 750[2]	1/4 1 50 125	(1/4) (1) (50) (125)	2[2] 10[2] 250[2] 750[2]	1/4 1 10 25	(1/4) (1) (10) (25)	0 0 0 0
7.1 Water (reactive)	3 2 1	5[2] 50[2] 125[2]	(5)[2] (50)[2] (125)[2]	— — —	5 50 125	(5) (50) (125)[2]	— — —	1 10 25	(1) (10) (25)	— — —

[1] A laboratory suite is a space up to 10,000 square feet (929 m2) bounded by not less than a one-hour fire-resistive occupancy separation within which the exempt amounts of hazardous materials may be stored, dispensed, handled or used. Up through the third floor and down through the first basement floor, the quantity in this table shall apply. Fourth, fifth and sixth floors and the second and third basement floor level quantity shall be reduced to 75 percent of this table. The seventh through 10th floor and below the third basement floor level quantity shall be reduced to 50 percent of this table.

[2] Quantities may be increased 100 percent when stored in approved exhausted gas cabinets, exhausted enclosures or fume hoods.

TABLE ~~443.1(2)~~ 3414.7(2) EXEMPT AMOUNTS OF HAZARDOUS MATERIALS, LIQUIDS AND CHEMICALS PRESENTING A HEALTH HAZARD MAXIMUM QUANTITIES ER LABORATORY SUITE[1]
When two units are given, values within parentheses are in pounds (Lbs.)

MATERIAL	STORAGE			USE CLOSED SYSTEMS			USE OPEN SYSTEMS	
	Solid Lbs.	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs.	Liquid Gallons (Lbs.)	Gas Cu. Ft.	Solid Lbs.	Liquid Gallons (Lbs.)
1. Corrosives	5,000	500	650[2]	5,000	500	650	1,000	100
2a. Highly toxics[2]	40	10	65	5	1	65	2	1/4
2b. Toxics	500	50	650[2]	500	50	650	5	1/2
3. Irritants	5,000	500	650	5,000	500	650	1,000	100
4. Sensitizers	5,000	500	650	5,000	500	650	1,000	100
5. Other health hazards	5,000	500	650	5,000	500	650	1,000	100

[1] A laboratory suite is a space up to 10,000 square feet (929 m2) bounded by not less than a one-hour fire-resistive occupancy separation within which the exempt amounts of hazardous materials may be stored, dispensed, handled or used. Up through the third floor and down through the first basement floor, the quantity in this table shall apply. Fourth, fifth and sixth floors and the second and third basement floor level quantity shall be reduced to 75 percent of this table. The seventh through 10th floor and below the third basement floor level quantity shall be reduced to 50 percent of this table.

[2] Permitted only when stored or used in approved exhausted gas cabinets, exhausted enclosures or fume hoods. Quantities of high toxics in use in open systems need not be reduced above the third floor or below the first basement floor level. Individual container size shall be limited to 2 pounds (0.91 kg) for solids and 1/4 gallon (0.95 L) for liquids.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

CHAPTER 35

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
CHAPTER 35 – REFERENCED STANDARDS

Adopting Agency		BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below			X																	
Chapter / Section	Codes																			
ICC	CA		X																	

ASTM ASTM International
100 Barr Harbor Drive
West Conshohocken , PA 19428-2959

Standard reference number	Title	Referenced in code section number
~~E 2010–01~~	~~Standard Test Method for Positive Pressure Fire Tests of Window assemblies~~	~~704A.3.2.2~~
	~~Standard Test Method for Fire Tests of Door Assemblies, Including Positive~~	

~~*E 2074–00* *Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies……. 704A.3.2.3*~~

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

FM

Factory Mutual
Standards Laboratories Department
1151 Boston-Providence Turnpike
Norwood, MA 02062

Standard reference number	Title	Referenced in code section number
FM 4430-80	*Acceptance Criteria for Smoke and Heat Vents……..……..910.3.1*	

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

ICC

International Code Council
500 New Jersey Avenue, NW
6th Floor
Washington, DC 20001

Standard reference number	Title	Referenced in code section number
ICC ES AC 331	*Acceptance Criteria for Smoke and Heat Vents……..……..910.3.1*	
ICC ES AC77	*Acceptance Criteria for Smoke Containment Systems Used with Fire-resistance-rated Elevator Hoistway Doors and Frames……707.14.1*	

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

NFPA

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
14~~—03~~*07*	Installation of Standpipe and Hose System*, as amended**……..…….905.2, 905.3.4, 905.4.2, 905.8	
	**NFPA 14, Amended Sections as follows:*	
	Replace Section 6.3.7.1	
	6.3.7.1 System water supply valves, isolation control valves, and other valves in fire mains shall be supervised in an approved manner in the open position by one of the following methods:	

(1) Where a building has a fire alarm system or a sprinkler monitoring system installed, the valve shall be supervised by:

(a) a central station, proprietary, or remote supervising station, or

(b) a local signaling service that initiates an audible signal at a constantly attended location.

(2) Where a building does not have a fire alarm system or a sprinkler monitoring system installed, the valve shall be supervised by:

(a) Locking the valves in the open position, or

(b) Sealing of valves and a approved weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

NFPA

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
24—02 07	*Installation of Private Fire Service Mains and Their Appurtenances; , as amended* ……..*	

**NFPA 24, Amended Sections as follows:*

Amend Section 4.2.1

Section 4.2.1. Installation work shall be done by fully experienced and responsible ~~persons~~ *contractors. Contractors shall be appropriately licensed in the State of California to install private fire service mains and their appurtenances.*

Revise Section 4.2.2 as follows:

4.2.2 *Installation or modification of private fire service mains shall not begin until plans are approved and appropriate permits secured from t*he authority having jurisdiction ~~shall always be consulted before the installation or remodeling of private fire service mains.~~

Add Section 4.2.2.1 as follows:

4.2.2.1 *As approved by the authority having jurisdiction, emergency repair of existing system may start immediately, with plans being submitted to the authority having jurisdiction within 96 hours from the start of the repair work.*

Revise Section 5.9.1.2 as follows:

Section 5.9.1.2 Fire department connections shall be properly supported *and protected from mechanical damage.*

Revise Section 5.9.5.1 as follows:

5.9.5.1 Fire department connections shall be on the street side of buildings and *as approved by the authority having jurisdiction.*

Revise Section 10.6.5 as follows:

10.6.5 Where a riser is located close to building foundations, underground fittings of proper design and type shall be used. ~~to avoid locating pipe joints in or under the foundation~~. *The pipe under the building or building foundation shall not contain mechanical joints.*

Exception: Where allowed in accordance with 10.6.2.

Revise Section 10.9.1 as follows:

10.9.1 Backfill shall be well tamped in layers or puddle under and around pipes to prevent settlement or lateral movement. *Backfill shall consist of clean fill sand or pea gravel to a minimum 6" below and to a minimum of 12" above the pipe* and shall contain no ashes, cinders, refuse, organic matter, or other corrosive materials.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

NFPA **National Fire Protection Association**
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
72—~~02~~ *07*	National Fire Alarm Code: *, as amended** …….. ……..901.6, 903.4.1, 904.3.5, 907.2, 907.2.1.1, 907.2.3.3, 907.2.3.5, 907.2.3.6.1, 907.2.6.3.3, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.4, 907.5, 907.9.1, *907.9.1.4*, 907.9.2, *907.9.2.1*, 907.10, 907.10.1.4, 907.10.1.5, 907.10.2.1, 907.14, 907.16, 907.17, 911.1, *1007.9, 1114B.2.2*, 3006.5

**NFPA 72, Amended Sections as follows:*

4.4.4.3. Transient Protection. To reduce the possibility of damage by induced transients, circuits and equipment shall be property protected in accordance with the requirements of ~~NFPA 70~~ *California* ~~National~~ Electrical Code, Article 800.

4.4.4.4. Wiring. The installation of all wiring, cable and equipment shall be in accordance with ~~NFPA 70~~ *California* ~~National~~ Electrical Code, and specifically with Article 760, 770 and 800, where applicable. Optical fiber cables shall be protected against mechanical injury in accordance with Article 760.

4.4.5 Protection of Fire Alarm Systems
Delete Exception No. 2:
~~Exception No. 2: Fully sprinklered buildings shall not require protection in accordance with 4.4.5.~~

5.13.4 ~~**5.12.4**~~ The operable part of each manual fire alarm box shall be not less than 1.1 m (3 1/2 ft) and not more than ~~1.37m (4 ½ ft)~~ *1.22 m (4 ft)* above floor level.

5.13.8 ~~**5.12.8**~~ Additional fire alarm boxes shall be provided so that the travel distance to the nearest fire alarm box shall not be in excess of 61m (200 ft) measured horizontally on the same floor.
Exception: When individual dwelling units are served by a single exit stairway, additional boxes at other than the ground floor may be omitted.

5.14 Fire Extinguisher Monitoring Device.
A fire extinguisher monitoring device shall indicate those conditions for a specific fire extinguisher required by *California Code of Regulations, Title 19, Chapter 1, --- Section FE and California Fire Code* ~~*NFPA 10, Standard for Portable Fire Extinguishers*~~, to a fire alarm control unit or other control unit.

6.4.2.2.2
Exception: (4) Where the vertically run conductors are contained in a 2-hour rated cable assembly, or enclosed (installed) in a 2-hour rated enclosure or a listed circuit integrity (C.I.) cable, which meets or exceeds a 2-hour fire resistive rating.

6.8.5.1.2 *(Manual Fire Alarm Boxes)*
Exception: Fire alarm systems dedicated to elevator recall control ~~and~~, supervisory service *and fire sprinkler monitoring only*

6.8.5.4.1 (2) A smoke detector that is continuously subjected to a smoke concentration above alarm threshold does

not delay the system within functions of 4.4.3, 6.8.1.1, or ~~6.15.2.1~~ 6.16.2.1 by more than ~~1 minute~~ *30 seconds.*

6.8.5.4.1 (5) Operation of a patient room smoke detector in Group I-1 and I-2 Occupancies shall not include an alarm verification feature.

~~*7.4.1.2. The total sound pressure level produced by combining the ambient sound pressure level with all audible notification appliances operation shall not exceed 120 110 dBA anywhere in the occupied area.*~~

~~*7.4.3.1. Audible notification appliances intended for operation in the private mode shall have a sound level of not less than 45dBA at 10 feet (3m) or more than 120 110 dBA at the minimum hearing distance from the audible appliance.*~~

11.7.2.1 The alarm verification feature shall not be used for household fire warning equipment.

11.7.5.7.1 The alarm verification feature shall not be used for household fire warning equipment.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

NFPA **National Fire Protection Association**
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	**Title**	**Referenced in code section number**
80 — ~~99~~ *07*	Fire Doors and Fire Windows…….....508.2.2.1, 715.4, 715.4.5, 715.4.6.1, 715.4.7.2, 715.5, 1008.1.3.3	

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211

APPENDIX CHAPTER 1

CALIFORNIA BUILDING CODE – MATRIX ADOPTION TABLE
APPENDIX CHAPTER 1 – ADMINISTRATION

Adopting Agency		BSC	**SFM**	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SL C
				1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)																				
Adopt only those sections that are listed below			**X**																	
Chapter / Section	Codes																			
102.6	**IBC**		**X**																	
104.2	**IBC**		**X**																	
104.3	**IBC**		**X**																	
104.4	**IBC**		**X**																	
104.9	**IBC**		**X**																	
104.9.1	**IBC**		**X**																	
105.1	**IBC**		**X**																	

105.2.1	**IBC**		**X**																
105.2.2	**IBC**		**X**																
105.3	**IBC**		**X**																
105.3.1	**IBC**		**X**																
105.4	**IBC**		**X**																
105.6	**IBC**		**X**																
105.7	**IBC**		**X**																
106 – 106.5	**IBC**		**X**																
~~**107**~~	~~**IBC**~~		~~**X**~~																
109.1 - 109.2	**IBC**		**X**																
~~**109.3**~~	~~**IBC**~~		~~**X**~~																
109.3.4 - 109.3.6	**IBC**		**X**																
109.3.8 – 109.3.10	**IBC**		**X**																
109.4 - 109.6	**IBC**		**X**																
110 – 110.4	**IBC**		**X**																
111 – 111.3	**IBC**		**X**																
112 – 112.3	**IBC**		**X**																
113 – 113.2	**IBC**		**X**																
114 – 114.3	**IBC**		**X**																
115 – 115.5	**IBC**		**X**																

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211, 18949.2(b)
References: Health and Safety Code Sections 13143, 13211